

CONTENTS

Part 1 Global Outlook of Biofuels. 1. Transition of Biofuels from First to Fourth Generation: The Journey So Far. 2. Intervention in Biofuel Policy through Indian Perspective: An Effort toward Sustainable Development Goals. Part 2 Technological Advances, Challenges & Opportunities of Biofuels. 3. Conventional and the Recent Advances in Technologies for the Production of Different Generations of Biofuels. 4. Paradigm Shift from Biofuel to Biorefinery: Prospects and Roadmap. 5. Challenges and Opportunities Associated with Second-Generation Biofuel. 6. Advanced Oxidation-Based Pretreatment of Wastewater for Enhanced Biofuel Production. 7. Nanocatalyzed Pretreatment of Wastewater for Biofuel Production. 8. Recent Status Potential Challenges and Future Perspectives of Biofuel Generated through Wastewater Treatment. Part 3 Micro Algae & Biofuel. 9. LCA of an Algal Biomass Plant: Microalgae to Bio-oil through Hydrothermal Liquefaction. 10. Constraints for Biofuel Production from Microalgae. Part 4 Global Policies and Storage System for Biofuels. 11. Renewable Energy Directives and Global Policies for Different Generation of Biofuel. 12. Biofuels Storage and Transport Systems: Challenges and Role of Type-IV Composite Overwrapped Vessels. Part 5 Anaerobic Biotechnology. 13. Anaerobic Biotechnology: A useful Technique for Biofuel Production. Part 6 Advance Green Fuel. 14. Biohythane Production : Future of Biofuel. 15. Waste-Derived Biohydrogen Enriched CNG/Biohythane: Research Trend and Utilities. 16. Effect of Co-Digestion and Pretreatment on the Bio-Hythane Production.